Draft

Department
of
Defense

DoD Electronic Data Interchange (EDI) Convention

ASC X12 Transaction Set 841 Specifications/Technical Information (Reference) (Version 003030)

This document was prepared by the Logistics Management Institute for the Under Secretary of Defense (Acquisition and Technology), Computer-aided Acquisition and Logistics Support and Electronic Data Interchange, under Task PL311. The task was performed under Contract MDA903-90-C-0006 with the Department of Defense.

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TABLE OF CONTENTS

1.0 INTRODUCTION

This chapter explains the purpose of the convention, and the scope of the guidance and provides an explanation of how to use the convention.

1.1 PURPOSE OF THE CONVENTION

The convention provides general guidance on the implementation of American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 electronic data interchange (EDI) standards within automated information systems (AIS) and on information interchange procedures that require the collection, reporting, and/or exchange of data needed to perform defense missions.

1.2 SCOPE

The guidance presented here may be used by organizational elements of the DoD community and by non-DoD organizations that exchange data with the DoD community in the course of their business relationships.

The DoD community encompasses the Military Services, Organizations of the Joint Chiefs of Staff, Unified and Specified Commands, Office of the Secretary of Defense, and the Defense agencies. (That community is collectively referred to as the DoD Components).

Non-DoD organizations include (a) non-Government organizations, both commercial and nonprofit; (b) Federal agencies of the United States Government other than DoD; (c) local and state governments; (d) foreign national governments; and (e) international government organizations.

The draft convention published in this document is for trial use and comment. DoD Components must submit to the Office of the Under Secretary of Defense (Acquisition and Technology), Computer-aided Acquisition and Logistics Support and Electronic Data Interchange [OUSD (A & T) CALS/EDI] their data requirements that are not covered in this convention as soon as possible, as indicated in Chapter 2.0, Section 2.1.

1.3 RESPONSIBLE ENTITY

{Reserved}

1.4 HOW TO USE THE IMPLEMENTATION CONVENTION

The main topics and structures of this document conform to the *EDI Implementation Reference Manual Guidelines* document that was developed by a task group of the subcommittee on education and implementation of the ASC X12. The purpose of having

agreed-upon topics and structure is to facilitate reference by the many industry and DoD personnel who are involved in implementing the uniform standards for electronic interchange of business transactions.

1.4.1 Conventions, Standards, and Guidelines

The terms conventions, standards, and guidelines are used throughout this document and are defined as follows:

- *Conventions* are the common practices and/or interpretations of the use of ASC X12 standards. Conventions define what is included in a specific implementation of an ASC X12 standard.

- *Standards* are the technical documentation approved by ASC X12; specifically, transaction sets, segments, data elements, code sets, and interchange control structure. Standards provide the structure for each ASC X12 document.

- *Guidelines* are instructions on the use of EDI. They provide additional information to assist in conducting EDI. Guidelines are intended to provide assistance and should not be your sole source of information.

1.4.1.1 Who Develops the Conventions?

Conventions result from a joint effort by business, technical, and EDI ASC X12 standards experts. The business data requirement is defined, a transaction set is selected, and the data requirement is then identified with data elements in the transaction set. A convention is usually developed before any computer EDI systems development work and serves as a design document when the development process begins.

1.4.1.2 Why Use a Convention?

To create an ASC X12 transaction, a user must know the data requirements, understand the ASC X12 standard, and be able to use that information to develop an interface program between the computer application and the ASC X12 translator. The necessary information to perform that task is contained in the convention document. Users who follow the convention will create a transaction set that all DoD users understand.

1.4.1.3 Who Needs a Convention?

System analysts and application programmers who plan to create or read ASC X12 transactions use a convention to aid in interface software design. The convention will help the programmer and analyst identify where their application data requirement should be carried in an ASC X12 transaction set.

1.4.4.4 Can I Develop a Convention?

Conventions already exist for some of the most common business practices. Copies of existing conventions can be acquired through your organization's EDI coordinator at the start of an EDI project. If you find no conventions for the business practice you are about to implement, your EDI coordinator should contact the CALS

Evaluation and Integration Office. See Chapter 2.0, *Maintenance*, Section 2.1 for the point of contact.

1.4.2 Documentation of Conventions

Conventions are adopted from, and are intended to be in conformance with, ANSI ASC X12 standards or ASC X12 Draft Standards for Trial Use (DSTU).

1.4.2.1 Transaction Set

Figure 1.4-1 provides an example of a transaction set table. The transaction set defines information of business or strategic significance and consists of a transaction set header segment, one or more data segments in a specified order, and a transaction set trailer segment. The actual ASC X12 standard as it appears in the official ASC X12 standards manual is presented on the right side of the page. That standard also includes both syntax notes and comments. The specific DoD usage designator is presented on the left side of the page.

The designation "N/U" stands for "not used" and appears in the left column if DoD does not use the specific segment. A page number will appear if the segment is used.

1.4.2.2 Transaction Set Segment

Figure 1.4-2 is an example of a transaction set segment.

DoD usage is specified on the left side of the page. For identifier (ID)-type data elements, acceptable code values are listed on the right side of the page under the definitions of the element.

DoD notes, reflecting how the convention is to be used appear on the right side of the page at the segment level or the data element level.

The following definitions are for use in interpreting the data element requirement designators in the DoD-specific segment directory section of the convention. For ASC X12 usage, see the definitions in *X12.6 Application Control Structure*.

- *Mandatory*
  Mandatory data elements are defined by ASC X12.

- *Optional*
  Optional data elements are used at the discretion of the sending party or are based upon mutual agreement between trading partners.

- *Required*
  Required data elements are considered optional under ASC X12 rules but are required by DoD decision.

- *Recommended*
  Recommended data elements are considered optional under ASC X12 rules and by the DoD, but the industry recommends

DEPARTMENT OF DEFENSE
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824 Application Advice

This standard provides the format and establishes the data contents of the Application Advice Transaction Set (824) within the context of an Electronic Data Interchange (EDI) environment. This transaction set provides the ability to report the results of an application system s data content edits of transaction sets. The results of editing transaction sets can be reported at the functional group and transaction set level, in either coded or free-form format. It is designed to accomodate the business need of reporting the acceptance, rejection or acceptance with change of any transaction set. The Application Advice should not be used in place of a transaction set designed as a specific response to another transaction set (e.g., purchase order acknowledgement sent in response to a purchase order).

Table 1

PAGE #	POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
2	010	ST	Transaction Set Header	M	1	
3	020	BGN	Beginning Segment	M	1	
			LOOP ID - N1			2
4	030	N1	Name	O	1	
5	040	N2	*Additional Name Information*	O	2	
6	050	N3	Address Information	O	2	
7	060	N4	Geographic Location	O	1	
8	070	REF	Reference Numbers	O	12	
9	080	PER	Administrative Communications Contact	O	3	

Table 2

PAGE #	POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
			LOOP ID - OTI			10000
10	010	OTI	Original Transaction Identification	M	1	
12	020	REF	Reference Numbers	O	12	
13	030	DTM	Date/Time Reference	O	2	
N/U	040	PER	Administrative Communications Contact	O	3	
N/U	050	AMT	Monetary Amount	O	10	
N/U	060	QTY	Quantity	O	10	
			LOOP ID - TED			10000
14	070	TED	Technical Error Description	O	1	
15	080	NTE	Note/Special Instruction	O	100	
16	090	SE	Transaction Set Trailer	M	1	

Figure 1.4-1 Example of a Transaction Set Table

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824 - APPLICATION ADVICE
BGN - BEGINNING SEGMENT

ANSI ASC X12 VERSION/RELEASE 003010DOD_

Segment: **BGN** **Beginning Segment**

Level: Header

Loop: ____

Mandatory **Usage:** Mandatory

Max Use: 1

Purpose: To indicate the beginning of a transaction set.

Syntax: If BGN05 is used, BGN04 is required.

Comments: *1.* BGN02 is the Transaction Set Reference Number.

2. BGN03 is the Transaction Set Date.

3. BGN04 is the Transaction Set Time.

4. BGN05 is the transaction set time qualifier.

Data Element Summary

	SEP DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	**BGN01**	**353**	**Transaction Set Purpose Code** Code identifying purpose of transaction set. 00 Original 01 Cancellation 04 Change 12 Not Processed	**M**	**ID**	**2/2**
Mandatory	**BGN02**	**127**	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	**M**	**AN**	**1/30**
Mandatory	**BGN03**	**373**	**Date** Date (YYMMDD).	**M**	**DT**	**6/6**
Conditional	**BGN04**	**337**	**Time** *Time expressed in 24-hour clock time (HHMM, time range: 0000 though 2359).*	**C**	**TM**	**4/4**
	Implementation Note: *Use HHMM.*					
Not Used	**BGN05**	**623**	**Time Code**	**O**	**ID**	**2/2**

Figure 1.4-2 Example of a Transaction Set Segment

their use to facilitate EDI. Most companies in the industry are expected to use this data element.

- *Not Used*
  "Not Used" data elements are those that DoD does not use.

- *Conditional*
  Conditional data elements depend on the presence of other data elements in the transaction set.

2.0 MAINTENANCE

This chapter describes the procedures for maintaining the DoD conventions. It also presents a section on version/release timing.

2.1 MAINTAINING CONVENTIONS

{Reserved}

2.2 VERSION/RELEASE TIMING

Identification of the official "version" of a standard is critical to the successful interchange of information. Each participant must be able to send and receive the same version to ensure the accuracy of the information exchanged.

The version is transmitted as a 12-character code in the Functional Group Header segment (GS) in Data Element #480, Version/Release/Industry ID. This 12-character code is used by ASC X12 as follows:

Position	Content
1–3	Version number
4–5	Release level of version
6	Subrelease
7–12	DoD/Industry or Trade Association ID

ASC X12 assigns the codes in Positions 1 through 6.

The version number (001, 002, 003, etc.) will change only after an official public review cycle leads to republication of a new American National Standard.

The release level of each new major version (Positions 4–6 in the Functional Group Header) will begin at "000" and increased by 1 for each new ASC X12 approved publication cycle, usually once a year. The fourth and fifth characters designate the release and the sixth character designates the subrelease.

The DoD Industry Trade Association ID (Position 7–12) is used to identify conventions. For this suffix, DoD will use "DoD_" with the 10th character identifying successive publications. The 11th and 12th characters may be used by the Military Departments or Defense agencies.

DoD conventions for using ASC X12 standards are published annually. Conventions developed for each release will be maintained for 4 years. Military Services and DoD agencies will determine which release to use on the basis of business need but will not use any release more than 4 years old without approval by the OUSD (A & T) CALS/EDI.

3.0 DoD CONVENTIONS FOR USING ASC X12 TRANSACTION SETS

This chapter defines the DoD transaction set conventions. It includes the instructions for implementing the control structure and definitions of the usage indicators and applicable codes.

3.1 INTRODUCTION

The power of the ASC X12 standard is in its building block concept, which standardizes the essential elements of business transactions. The concept is analogous to a "standard bill of materiels and the construction specifications," which gives the architect flexibility in what can be designed with standardized materiels and procedures. The EDI system designer, like the architect, uses the ASC X12 standards to build business transactions that are often different because of their function and yet utilize the ASC X12 standards. The "bill of materiels and the construction specification" of ASC X12 are the standards found in the published technical documentation.

ASC X12.3 – The *Data Element Dictionary* specifies the data elements used in the construction of the segments that comprise the transaction sets developed by ASC X12.

ASC X12.5 – The *Interchange Control Structure* provides the interchange control segment (also called an envelope) of a header and trailer for the electronic interchange through a data transmission; it also provides a structure to acknowledge the receipt and processing of the envelope.

ASC X12.6 – The *Application Control Structure* defines the basic control structures, syntax rules, and semantics of EDI.

ASC X12.22 – The *Data Segment Directory* provides the definitions and specifications of the segments used in the construction of transaction sets developed by ASC X12.

The DoD convention in Section 3.4 conforms to the above standards, and each transaction set is a complete document to the extent possible. For further clarification of acronyms, abbreviations, and codes, refer to ASC X12 published technical documentation. For copies, contact either the OUSD (A & T) CALS/EDI or the Data Interchange Standards Association, Inc., Suite 355, 1800 Diagonal Road, Alexandria, VA 22314.

3.2 CONTROL SEGMENTS

In addition to the communication control structure, the EDI structure provides the standards user with multiple levels of control to ensure data integrity. It does so by using header and trailer control segments

designed to identify uniquely the start and end of the interchange functional groups and transaction sets. The relationship of these control segments is shown in Figure 3 2-1 Control Segment specifications are defined in Section 3.2.2.

3.2.1 Description of Use

The interchange header and trailer segments surround one or more functional groups or interchange-related control segments and perform the following functions:

- Define the data element separators and data segment terminators
- Identify the sender and receiver
- Provide control information
- Allow for authorization and security information.

The Interchange Acknowledgment Segment is used to acknowledge one interchange header and trailer envelope where the envelope surrounds one or more functional groups. (No acknowledgment is made for the interchange acknowledgment.)

The interchange control number value in the acknowledgment (TA1 segment) is the same as that for the ISA segment that is being acknowledged. The control number serves as a link between the interchange header and trailer and the acknowledgment of that header and trailer.

The interchange acknowledgment does not report any status on the functional groups contained in the interchange and is separate from the communication system's error procedures.

The preparer of the interchange header and trailer indicates the level of acknowledgment in Data Element 113, Acknowledgment Requested. If an acknowledgment is requested, then the recipient must return an acknowledgment. If not requested, none should be given.

The interchange acknowledgment control segments are placed after the interchange header and before the first functional group or before the interchange trailer if there are no functional groups.

Control segments are standard for all implementation conventions produced for the Department of Defense. Some codes associated with individual data elements within the control segments are unique to the individual transaction set. Others, identify the ANSI version and release in which the convention is written.

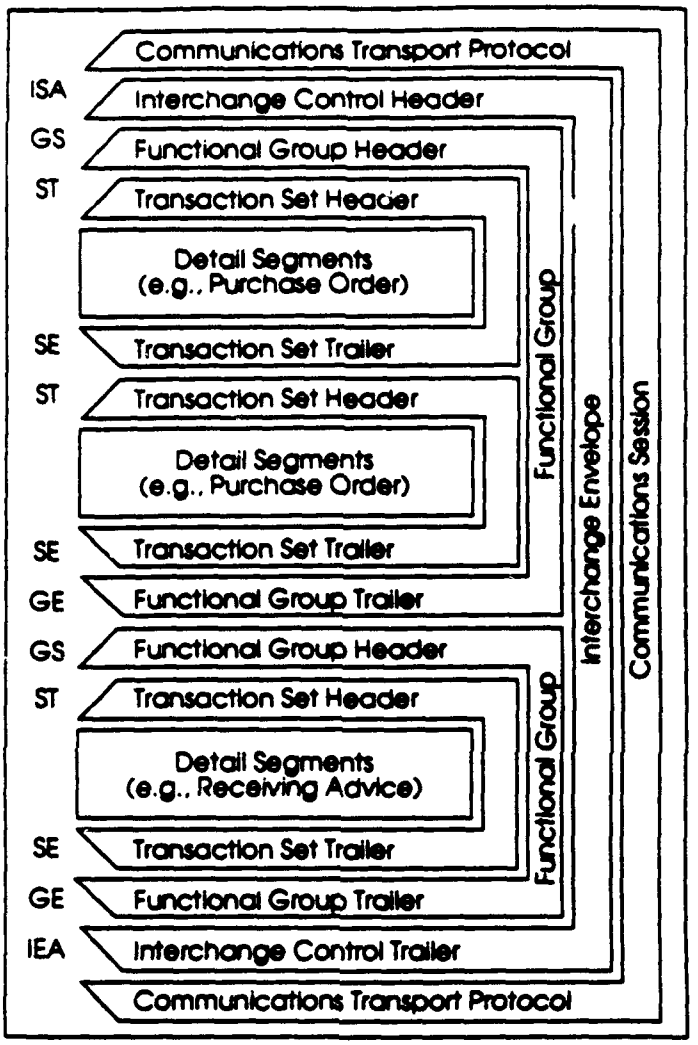

Figure 3.2-1. Hierarchical Structure

3.2.2 Control Segment Specifications

Segment: ISA Interchange Control Header

Purpose: To start and identify an interchange of one or more functional groups and interchange-related control segments.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	ISA01	I01	**Authorization Information Qualifier** Code to identify the type of information in the Authorization Information. 00 No Authorization Information Present (No Meaningful Information in I02)	M	ID	2/2
Mandatory	ISA02	I02	**Authorization Information** Information used for additional identification or authorization of the sender or the data in the interchange. The type of information is set by the Authorization Information Qualifier. ***Implementation Note:*** *If no authorization information is agreed to by trading partners, fill field with blanks.*	M	AN	10/10
Mandatory	ISA03	I03	**Security Information Qualifier** Code to identify the type of information in the Security Information. 01 Password	M	ID	2/2
Mandatory	ISA04	I04	**Security Information** This is used for identifying the security information about the sender or the data in the interchange. The type of information is set by the Security Information Qualifier. ***Implementation Note:*** *An agreed upon password. If no security information is agreed to by trading partners, fill field with blanks.*	M	AN	10/10
Mandatory	ISA05	I05	**Interchange ID Qualifier** Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified. ZZ Mutually Defined ***Code Value Implementation Note:*** *An agreed upon designation of DoD Activity Address Code (DoDAAC) or other code coordinated with the value-added network (VAN).*	M	ID	2/2
Mandatory	ISA06	I06	**Interchange Sender ID** Identification code published by the sender for other parties to use as the receiver ID to route data to them. The sender always codes this number in the sender ID element. ***Implementation Note:*** *Department of Defense activities use DoD Activity Address Code (DoDAAC) or other code coordinated with the value-added network (VAN). Non-DoD activities use identification code qualified by ISA05 and coordinated with the VAN.*	M	ID	15/15
Mandatory	ISA07	I05	**Interchange ID Qualifier** Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified. ZZ Mutually Defined	M	ID	2/2

Code Value Implementation Note:
An agreed upon designation of DoD Activity Address Code (DoDAAC) or other code coordinated with the value-added network (VAN).

Mandatory **ISA08** **I07** **Interchange Receiver ID** **M ID 15/15**
Identification code published by the receiver of the data. When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them.

Implementation Note:
Department of Defense activities use DoD Activity Address Code (DoDAAC) or other code coordinated with the value-added network (VAN). Non-DoD activities use identification code qualified by ISA05 and coordinated with the VAN.

Mandatory **ISA09** **I08** **Interchange Date** **M DT 6/6**
Date of the interchange.

Implementation Note:
Assigned by translation software. YYMMDD

Mandatory **ISA10** **I09** **Interchange Time** **M TM 4/4**
Time of the interchange.

Implementation Note:
Assigned by translation software. HHMM

Mandatory **ISA11** **I10** **Interchange Control Standards Identifier** **M ID 1/1**
Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer.

U U.S. EDI Community of ASC X12, TDCC, and UCS

Mandatory **ISA12** **I11** **Interchange Control Version Number** **M ID 5/5**
This version number covers the interchange control segments and the functional group control segments.

00303 Draft Standard for Trial Use Approved for Publication by ASC X12 Procedures Review Board Through October 1992

Code Value Implementation Note:
Version ID as defined or agreed upon by the trading partners.

Mandatory **ISA13** **I12** **Interchange Control Number** **M N0 9/9**
This number uniquely identifies the interchange data to the sender. It is assigned by the sender. Together with the sender ID it uniquely identifies the interchange data to the receiver. It is suggested that the sender, receiver, and all third parties be able to maintain an audit trail of interchanges using this number.

Mandatory **ISA14** **I13** **Acknowledgment Requested** **M ID 1/1**
Code sent by the sender to request an interchange acknowledgment.

0 No Acknowledgment Requested

1 Interchange Acknowledgment Requested

Mandatory **ISA15** **I14** **Test Indicator** **M ID 1/1**
Code to indicate whether data enclosed by this interchange envelope is test or production.

P Production Data

T Test Data

Code Value Implementation Note:
Assigned by translation software.

Mandatory

ISA16 **I15** **Subelement Separator** **M AN 1/1**
This is a field reserved for future expansion in separating data element subgroups. (In the interest of a migration to international standards, this should be different from the data element separator).

Implementation Note:
Use character "<".

Segment: GS Functional Group Header

Purpose: To indicate the beginning of a functional group and to provide control information

Syntax: The data interchange control number (GS06) in this header must be identical to the same data element in the associated Functional Group Trailer (GE02).

Comment: A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	GS01	479	**Functional Identifier Code** Code identifying a group of application related Transaction Sets.	M	ID	2/2
			Implementation Note: *Choose the code value appropriate to the information content of the functional group. See X12 Dictionary for source code list.* **SP** Specifications/Technical Information (841)			
Mandatory	GS02	142	**Application Sender's Code** Code identifying party sending transmission. Codes agreed to by trading partners.	M	AN	2/15
			Implementation Note: *Department of Defense activities use DoD Activity Address Code (DoDAAC). Non-DoD activities use identification code assigned by DoD activity. For increased security, non-DoD code should differ from that used in ISA06.*			
Mandatory	GS03	124	**Application Receiver's Code** Code identifying party receiving transmission. Codes agreed to by trading partners.	M	AN	2/15
			Implementation Note: *Department of Defense activities use DoD Activity Address Code (DoDAAC). Non-DoD activities use identification code assigned by DoD activity. For increased security, non-DoD code should differ from that used in ISA08.*			
Mandatory	GS04	373	**Date** Date sender generated a transaction set.	M	DT	6/6
Mandatory	GS05	337	**Time** Time expressed in 24-hour clock time.	M	TM	4/6
Mandatory	GS06	28	**Group Control Number** Assigned number originated and maintained by the sender.	M	N0	1/9
			Implementation Note: *Assigned by translation software.*			
Mandatory	GS07	455	**Responsible Agency Code** Code used in conjunction with Data Element 480 to identify the issuer of the standard.	M	ID	1/2
			X Accredited Standards Committee X12			

Code Value Implementation Note:
Indicates that an ANSI X12 standard is being transmitted.

Mandatory | **GS08** | **480** | **Version/Release/Industry ID Code** | **M** | **ID** | **1/12**

Code indicating the version, release, subrelease and industry identifier of the EDI standard being used. Positions 1-3, version number; positions 4-6, release and subrelease level of version; positions 7-12, industry or trade association identifier (optionally assigned by user).

003030 Draft Standards Approved by ASC X12 Through October 1992.

Code Value Implementation Note:
Code value agreed to by trading partners. See X12 Dictionary for source code list.

Segment: GE **Functional Group Trailer**

Purpose: To indicate the end of a functional group and to provide control information

Syntax: The data interchange control number (GE02) in this trailer must be identical to the same data element in the associated Functional Group Header (GS06).

Comment: The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	GE01	97	**Number of Transaction Sets Included** Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element.	M	N0	1/6
			Implementation Note: *Assigned by translation software.*			
Mandatory	GE02	28	**Group Control Number** Assigned number originated and maintained by the sender.	M	N0	1/9
			Implementation Note: *Assigned by the translation software. This control number must match the control number of the preceding GS06 control number.*			

Segment: IEA Interchange Control Trailer

Purpose: To define the end of an interchange of one or more functional groups and interchange-related control segments.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	IEA01	I16	**Number of Included Functional Groups** A count of the number of functional groups included in a transmission.	M	N0	1/5
			Implementation Note: *Assigned by translation software.*			
Mandatory	IEA02	I12	**Interchange Control Number** This number uniquely identifies the interchange data to the sender. It is assigned by the sender. Together with the sender ID it uniquely identifies the interchange data to the receiver. It is suggested that the sender, receiver, and all third parties be able to maintain an audit trail of interchanges using this number.	M	N0	9/9
			Implementation Note: *Assigned by the translation software. This control number must match the number that occurs in ISA13.*			

3.3 EXAMPLE OF CONVENTION USE

EXAMPLE - SPECIFICATIONS/TECHNICAL DOCUMENTATION 841 TRANSACTION SET (REFERENCE)

ASC X12 EDI FORMAT	DEFINITION
SE*841*0001	This is an 841 transaction set with a control number of 0001.
SPI*90*TN*841REF001****00*SD*06 n/l	The data being reference are classified government non-classified (Code 90). The transaction set reference number (Code TN) is 841REF001. This is an original transmission (Code 00) of data in support of an RFQ (Code SD). The data have a commercial protection requirement of company proprietary (Code 06).
REF*KS*N0001993Q1234 n/l	The solicitation number (Code KS) to which the data in this transaction set pertain is N0001993Q1234.
DTM*993*930615 n/l	The date of the solicitation (Code 993) is June 15, 1993.
REF*TN*841REF001 n/l	The reference number of this transaction set (Code TN) is 841REF001.
DTM*097*930616 n/l	The creation date of this transaction set (Code 097) is June 16, 1993.
REF*ZZ*RFQ2468 n/l	The unique reference number (Code ZZ) of the transaction set to which the data in this transaction set pertain is RFQ2468.
DTM*368*930616 n/l	The date of the referenced transaction set (Code 368) is June 16, 1993
N1*BY**10*N00019 n/l	The buying activity (Code BY) as specified by DoDAAC (Code 10) N00019.
N1*SE**33*CD345 n/l	The selling party (Code SE) as specified by CAGE code (Code 33) CD345.
N1*DG**10*N45678 n/l	The configuration manager (Code DG) as specified by DoDAAC N45678.
PER*IC*Joe Louis*EM*DG8YS892 n/l	The point of contact (Code IC) at the originator's activity is Joe Louis. His electronic mail address (Code EM) is DG8YS892.
HL*1**A*1 n/l	This is the first iteration of the HL Loop, as specified by the number 1. It has no parent. The hierarchical level is the assembly (Code A). It has subordinate levels.
SPI*90*DD*12E2211-877***F n/l	The data being provide is government non-classified (Code 90). It is a Engineering Data List (Code DD) with a reference number of 12E2211-877. It is released for quotation (Code F).

LIN**F7*FB111A*FS*1680010839*PD *Panel, Ground Check*ZZ*FJ n/l	The end item application (Code F7) is FB111A. The NSN (Code FS) is 1680010839. The part number description (Code PD) is Panel, Ground Check. The applicable Data Tech organization Code (Code ZZ) is FJ.
N1*33**10*N78961 n/l	The Data Tech entity (Code 33) as specified by DoDAAC (Code 10) N78961.
N1*ZE**33*B1234 n/l	The Manufacturer (Code ZE) as specified by CAGE code (Code 33) B1234.
HL*2*1*U*1 n/l	The second iteration of the HL Loop as specified by the number 2. Its parent is HL 1. The hierarchical level is the subassembly (Code U). It has subordinate levels (Code 1).
SPI*92*DG*12E2211***A***02 n/l	Drawing (Code DG) number 12E2211 is classified government confidential (Code 92). It is an approved Version (Code A) and has a commercial protection requirement of company confidential (Code 02).
RDT*E*AY*007*921215 n/l	This is revision (Code E) "AY", with an effective date (Code 007) of December 15, 1992.
LIN**PD*Panel Assembly n/l	The item description (Code PD) is Panel Assembly.
HL*3*2*I*0* n/l	This is the third iteration of the HL segment as specified by the number 3. Its parent is HL 2. The hierarchical level is the item (Code I). It has no child (Code 0).
SPI*90*ZZ*LM12E2211*Bill of Material n/l	The item number (Code ZZ), LM12E2211, is a Bill of Material and is government non-classified (Code 90).
HL*4*1*U*1 n/l	This is the fourth iteration of the HL segment as specified by the number 4. Its parent is HL 1. The hierarchical level is subassembly (Code U). It has a child (Code 1).
SPI*90*DG*12E2213***D***06 n/l	The drawing (Code DG) number is 12E2213. It is government non-classified (Code 90) and the commercial protection level is company proprietary (Code 06). It is released for production (Code D).
LIN*PD*Bracket n/l	The item description (Code PD) is bracket.
N1*ZE**33*GB5678 n/l	The Manufacturer (Code ZE) has a CAGE code (Code 33) of GB5678.
HL*5*4*I*0* n/l	This is the fifth iteration of the HL segment as specified by the number 5. Its parent is HL 4. The hierarchical level is the item (Code I). It has no child (Code 0).
SPI*90*S3*Z-R701 n/l	The specification (Code S3) number is Z-R701. It is government non-classified (Code 90).
RDT*H*As-Built n/l	The Version level (Code H) is "As-Built."

SE*31*0001	This transaction set, whose control number is 0001, contains 31 segments.

3.4 DoD CONVENTION

841 Specifications/Technical Information

This Draft Standard for Trial Use contains the format and establishes the data contents of the Specifications/Technical Information Transaction Set (841) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to transmit specifications or technical information between trading partners. It can be used to allow EDI trading partners the ability to exchange a complete or partial technical description of a product, process, service, etc. over the same path as any other EDI transaction. The detail area can include graphic, text, parametric, tabular, image, spectral, or audio data. A transmission includes identification information to assist the receiver in interpreting and utilizing the information included in the transaction.

Further action as a consequence of the receipt and initial processing of the specification or other technical data may or may not require human intervention. The transmission and receipt of the data may require private agreement between the trading partners to automate the receipt of the data.

The total transaction must be in the general form of all ASC X12 transactions so that an EDI computer system will be able to automatically recognize it as a Specification/Technical Information Transaction Set and pass it on for processing of the data itself. The transaction set is not media dependent.

The detail area of the Specification/Technical Information Transaction Set provides a structure which allows for the exchange of a variety of specification information. For example, if the transaction contains information describing a complete assembly, it would be necessary to include the assembly model, the models for each of the individual parts, and the associated specifications. In the case of a process it may be necessary to transmit the specification of the product along with the specifications of the process and raw materials. This transaction set can also be linked to other transaction sets.

This transaction set is not limited to a specific transmission protocol and uses other standards as applicable where they do not conflict with these requirements for specification transaction.

Implementation Notes

1. This draft implementation convention is designed to be used to reference specifications/technical information that is applicable to the production of an item and is associated with an 840 transaction set (Request for Quotation).

2. The 841 transaction set may contain a drawing list that may or may not be included in an associated 840 transaction set (Request for Quotation) or other transaction set. The 840 transaction set can carry a drawing list in the N9 segment at the Header level, but more likely the list will be included in the N9 segment at the Detail level. The DoD Implementation Guide for the 840 transaction set includes the N9 segments and loops at the Header and Detail level. The N9 segment will include the code for drawings (128 data element, Code DG) to support a cross reference list of drawings from an Engineering Data List for an associated 841. When 840 and 841 transaction sets are issued together, the BQT segment in the Header level of the 840 will tie a solicitation number to the REF segment in the Header level of the 841. Reference segments in both transaction sets can contain unique transaction set control numbers to further tie the transaction sets together if necessary.

Table 1

PAGE #	POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
5	010	ST	Transaction Set Header	M	1	
			LOOP ID - SPI			>1
6	020	SPI	Specification Identifier	M	1	
N/U	030	RDT	Revision Date/Time	O	>1	

8	040	NTE	Note/Special Instruction	O	>1	
N/U	050	X1	Export License	O	1	
N/U	060	X2	Import License	O	1	
N/U	070	X7	Customs Information	O	1	
N/U	080	GOV	Military Standard 1840-A Record Definition	O	>1	
			LOOP ID - SPI/REF			>1
9	090	REF	Reference Numbers	O	1	
10	100	DTM	Date/Time Reference	O	>1	
N/U	110	PER	Administrative Communications Contact	O	>1	
			LOOP ID - SPI/N1			>1
11	120	N1	Name	O	1	
12	130	N2	Additional Name Information	O	2	
13	140	N3	Address Information	O	2	
14	150	N4	Geographic Location	O	1	
N/U	160	REF	Reference Numbers	O	>1	
15	170	PER	Administrative Communications Contact	O	>1	

Table 2

PAGE #	POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
			LOOP ID - HL			>1
16	010	HL	Hierarchical Level	M	1	
			LOOP ID - HL/SPI			>1
18	020	SPI	Specification Identifier	O	1	
20	030	RDT	Revision Date/Time	O	>1	
22	040	LIN	Item Identification	O	1	
26	045	N1	Name	O	>1	
27	050	MSG	Message Text	O	>1	
			LOOP ID - HL/PID			>1
N/U	060	PID	Product/Item Description	O	1	
N/U	065	PKD	Packaging Description	O	>1	
N/U	070	QTY	Quantity	O	>1	
N/U	074	MEA	Measurements	O	>1	
N/U	075	UIT	Unit Detail	O	>1	
N/U	076	LOC	Location	O	1	
N/U	077	PWK	Paperwork	O	>1	
			LOOP ID - HL/PID/PKG			>1
N/U	078	PKG	Marking, Packaging, Loading	O	1	
N/U	079	MEA	Measurements	O	>1	
			LOOP ID - HL/REF			>1
N/U	080	REF	Reference Numbers	O	1	
N/U	090	DTM	Date/Time Reference	O	>1	
N/U	100	PER	Administrative Communications Contact	O	>1	
			LOOP ID - HL/LX			>1
N/U	109	LX	Assigned Number	O	1	
N/U	110	MEA	Measurements	O	1	
N/U	120	DTM	Date/Time Reference	O	>1	
N/U	130	REF	Reference Numbers	O	>1	
			LOOP ID - HL/EFI			>1
N/U	140	EFI	Electronic Format Identification	O	1	

N/U	150	GOV	Military Standard 1840-A Record Definition	O	>1	
N/U	160	BIN	Binary Data	O	>1	
			LOOP ID - HL/CID			>1
N/U	170	CID	Characteristic/Class ID	O	1	
N/U	180	UIT	Unit Detail	O	1	
N/U	190	TMD	Test Method	O	>1	
N/U	200	PSD	Physical Sample Description	O	1	
N/U	201	CSS	Conditional Sampling Sequence	O	1	
N/U	210	SPS	Sampling Parameters for Summary Statistics	O	1	
N/U	220	MSG	Message Text	O	>1	
			LOOP ID - HL/CID/MEA			>1
N/U	230	MEA	Measurements	O	1	
N/U	240	DTM	Date/Time Reference	O	>1	
N/U	250	REF	Reference Numbers	O	>1	
			LOOP ID - HL/CID/STA			>1
N/U	260	STA	Statistics	O	1	
N/U	270	DTM	Date/Time Reference	O	>1	
N/U	280	REF	Reference Numbers	O	>1	
			LOOP ID - HL/CID/CSF			>1
N/U	282	CSF	Conditional Sampling Frequency	O	1	
N/U	283	LS	Loop Header	O	1	
			LOOP ID - HL/CID/CSF/CID			>1
N/U	284	CID	Characteristic/Class ID	O	1	
N/U	285	MEA	Measurements	O	1	
N/U	286	STA	Statistics	O	1	
N/U	287	LE	Loop Trailer	O	1	
			LOOP ID - HL/CID/EFI			>1
N/U	290	EFI	Electronic Format Identification	O	1	
N/U	300	GOV	Military Standard 1840-A Record Definition	O	>1	
N/U	310	BIN	Binary Data	O	>1	

Table 3

PAGE #	POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
28	010	SE	Transaction Set Trailer	M	1	

NOTES:

2/010 To be meaningful, at least one of the SPI, PID, REF, MEA, EFI or CID loops must be present with each occurence of the HL loop.

2/020 The HL segment may be used to define the hierarchical relationship of product-related specifications reported in the associated HL loop. Product-related specifications may refer to the product in its entirety or to subunits of the product. For example, if the top level refers to an assembly, the second-level HL segment may refer to parts or subassemblies of the top assembly. This pattern may be repeated as often as required.

2/170 The CID segment may be used to define either a general class of properties, such as physical properties, or an individual property within a class. The CID loop allows the user the ability to define specifications such as the properties of the item or class, the environmental conditions under which the specifications

apply, the test methods to be used, and other parameters related to properties within the current HL hierarchical level.

2/201 The sampling sequence specified in the CSS segment will take precedence over any other sampling rate (PSD03, PSD09, SPS06, CSF02, and CSF03) from the point the CSS01 event occurs until the specified sequence is completed.

2/201 If no other sampling is specified, then only the sampling indicated in this segment is performed when the CSS01 event occurs.

2/282 The sampling rate specified is the CSF segment. It would take precedence over the normal sampling rate specified in PSD03 while the conditions of the CSF segment are satisfied, but would NOT take precedence over the sampling sequence activated by the proposed CSS segment.

2/282 If no other sampling rate is specified, then the only sampling indicated in the CSF segment is performed while the CSF conditions are met. Sampling will cease when the conditions are no longer met.

2/282 Conditional values specified in DE 740 (Range Minimum) will be interpreted as "greater than or equal to this value." Values specified in DE 741 (Range Maximum) will be interpreted to mean "less than or equal to this value."

2/282 Repetitions of the CSF loop allow several frequency changes (and the conditions that would trigger those changes) to be specified.

2/282 If the conditions are such that several CSF values are activated at the same time, the value with the highest sampling rate shall prevail.

2/284 Either the MEA segment or the STA segment must occur, but not both.

2/284 The CID loop within the CSF loop is used to specify the conditions that will trigger activation of the conditional value in the CSF segment.

2/284 Repetitions of the CID loop will have an implied logical AND between the conditions set in each iteration.

2/285 The elements of the CID segment identify the conditional property. If the property is a measurement from within the manufacturing process of a plant environment, rather than the product, the segment also identifies the location where the measurements are to be observed.

2/286 If the condition is based on single test measurements, the MEA segment is used to specify the units of measure, and the open or closed numeric range of the conditional test.

Segment: ST **Transaction Set Header**

Level: Header

Loop: ____

Mandatory **Usage:** Mandatory

Max Use: 1

Purpose: To indicate the start of a transaction set and to assign a control number

Semantic: The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the invoice transaction set).

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	ST01	143	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set.	M	ID	3/3
		841	X12.51 Specifications/Technical Information			
Mandatory	ST02	329	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9

Implementation Note:
This unique control number is assigned by the originator of the transaction set or by the originator's application program. This same number is carried in SE02.

Segment: **SPI** **Specification Identifier**

Level: Header

Loop: SPI **Repeat:** >1

Mandatory **Usage:** Mandatory

Max Use: 1

Purpose: To provide a description of the included specification or technical data items.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	SPI01	786	**Security Level Code** Code indicating the level of confidentiality assigned by the sender to the information following.	M	ID	2/2
			Implementation Notes: *1. Use any code.* *2. If the data being referenced have both a government security classification and a commercial security protection requirement, then this data element will carry the government security classification code and the commercial security protection code will be carried in SPI09.* *3. If the data being referenced have only one protection requirement, then this data element can carry either the government security classification or the commercial security protection code.* *4. Use this data element to indicate the highest protection level (government or commercial) of the data being referenced. Use the SPI segment at the Detail level to indicate the protection level of individual data items.*			
Mandatory	SPI02	128	**Reference Number Qualifier** Code qualifying the Reference Number. **TN** Transaction Reference Number ***Code Value Implementation Note:*** *Use Code TN for the unique reference number of this transaction set.*	M	ID	2/2
Mandatory	SPI03	127	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier. ***Implementation Note:*** *This is the unique reference number of this transaction set.*	M	AN	1/30
Not Used	SPI04	790	**Entity Title**	O	AN	1/132
Not Used	SPI05	791	**Entity Purpose**	O	AN	1/80
Not Used	SPI06	792	**Entity Status Code**	O	ID	1/1
Required	SPI07	353	**Transaction Set Purpose Code** Code identifying purpose of transaction set. ***Implementation Note:*** *Use any appropriate listed code.* **00** Original **01** Cancellation	O	ID	2/2

Code Value Implementation Note:
Use Code 01 when cancelling an 841 transaction set referencing technical documentation. When Code 01 is used, only the HL segment (HL01 and HL03) at the Detail level (Table 2) is needed.

02 Add
03 Delete
04 Change

Optional	SPI08	755	**Report Type Code** Code indicating the title or contents of a document, report or supporting item	O	ID	2/2

SD Support Data for a Request for Quote

Code Value Implementation Note:
Use Code SD to indicate this transaction set is providing technical data in support of a solicitation.

Optional	SPI09	786	**Security Level Code** Code indicating the level of confidentiality assigned by the sender to the information following.	O	ID	2/2

Implementation Notes:
1. Use this data element ONLY when SPI01 is Code 90, 92, 93, 94, or 99, and the data being referenced also have a commercial security protection requirement.

2. Use this data element to indicate the highest level of commercial security protection assigned to the data being referenced. Use the SPI segment at the Detail level to indicate the commercial security protection of individual data items.

00 Company Non-Classified
01 Company Internal Use Only
02 Company Confidential
03 Company Confidential, Restricted (Need to Know)
04 Company Registered (Signature Required)
05 Personal
09 Company Defined (Trading Partner Level)

Not Used	SPI10	559	**Agency Qualifier Code**	O	ID	2/2
Not Used	SPI11	916	**Code List Reference**	O	AN	1/6
Not Used	SPI12	554	**Assigned Number**	O	N0	1/6

Segment: NTE **Note/Special Instruction**

Level: Header

Loop: SPI

Optional

Usage: Optional

Max Use: >1

Purpose: To transmit information in a free-form format, if necessary, for comment or special instruction

Comment: The NTE segment permits free-form information/data which, under ANSI X12 standard implementations, is not machine processable. The use of the "NTE" segment should therefore be avoided, if at all possible, in an automated environment.

Implementation Note:
Use this segment to provide information pertinent to the entire transaction set. To provide information relative to a specific data item, use the MSG segment in Table 2.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Optional	NTE01	363	**Note Reference Code** Code identifying the functional area or purpose for which the note applies.	O	ID	3/3
		GEN	Entire Transaction Set			
			Code Value Implementation Note: *Use Code GEN for any notes that relate to the entire transaction set.*			
Mandatory	NTE02	3	**Free Form Message** Free-form text.	M	AN	1/60

Segment: **REF** **Reference Numbers**

Level: Header

Loop: SPI/REF **Repeat:** >1

Required

Usage: Optional

Max Use: 1

Purpose: To specify identifying numbers.

Syntax: **R0203** — At least one of REF02 or REF03 is required.

Implementation Notes:

1. At least one REF segment is required using Code KS.

2. Additional repititions of the REF segment may be used to provide other applicable reference numbers.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	REF01	128	**Reference Number Qualifier** Code qualifying the Reference Number.	M	ID	2/2
			C4 Change Number ***Code Value Implementation Note:*** *Use Code C4 for the contract modification number to which the data referenced in this transaction set pertain.*			
			CT Contract Number ***Code Value Implementation Note:*** *Use Code CT for the contract number to which the data referenced in this transaction set pertain.*			
			KS Solicitation ***Code Value Implementation Note:*** *Use Code KS to specify the solicitation number to which the data referenced in this transaction set pertain.*			
			TN Transaction Reference Number ***Code Value Implementation Note:*** *Use Code TN for the unique reference number of this transaction set.*			
			ZZ Mutually Defined ***Code Value Implementation Note:*** *Use Code ZZ for the unique reference number of the transaction set to which the data in this transaction set pertain.*			
Conditional	REF02	127	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	C	AN	1/30
Not Used	REF03	352	**Description**	C	AN	1/80

Segment: **DTM** **Date/Time Reference**

Level: Header

Loop: SPI/REF

Optional **Usage:** Optional

Max Use: >1

Purpose: To specify pertinent dates and times

Syntax: **R0203** — At least one of DTM02 or DTM03 is required.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	**DTM01**	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time. **092** Contract Effective ***Code Value Implementation Note:*** *When REF01 is Code CT, use Code 092 to indicate the date of the contract specified in REF02.* **097** Transaction Creation ***Code Value Implementation Note:*** *When REF01 is Code TN, use Code 097 to indicate the creation date of this transaction set.* **152** Effective Date of Change ***Code Value Implementation Note:*** *When REF01 is Code C4, use Code 152 to indicate the date of the contract modification specified in REF02.* **368** Submittal ***Code Value Implementation Note:*** *When REF01 is Code ZZ, use Code 368 to indicate the date of the 840 transaction set specified in REF02.* **993** Request for Quotation ***Code Value Implementation Note:*** *When REF01 is Code KS, use Code 993 to indicate the date of the solicitation specified in REF02.*	**M**	**ID**	**3/3**
Conditional	**DTM02**	**373**	**Date** Date (YYMMDD).	**C**	**DT**	**6/6**
Not Used	**DTM03**	**337**	**Time**	**C**	**TM**	**4/6**
Not Used	**DTM04**	**623**	**Time Code**	**O**	**ID**	**2/2**
Not Used	**DTM05**	**624**	**Century**	**O**	**N0**	**2/2**

Segment: **N1** **Name**

Level: Header

Loop: SPI/N1 **Repeat:** >1

Optional **Usage:** Optional

Max Use: 1

Purpose: To identify a party by type of organization, name and code

Syntax: *1.* R0203 — At least one of N102 or N103 is required.

2. P0304 — If either N103 or N104 is present, then the other is required.

Comment: This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

Implementation Note:
Whenever possible, identification and address information should be described using N101, N103, and N104. Use N102 and segments N2 through N4 when this information cannot be provided by use of a CAGE code or a DoDAAC.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	N101	98	**Entity Identifier Code** Code identifying an organizational entity, a physical location, or an individual	M	ID	2/2
			BY Buying Party (Purchaser)			
			DG Design Engineering			
			Code Value Implementation Note: *Use Code DG to identify a configuration manager.*			
			SE Selling Party			
Conditional	N102	93	**Name** Free-form name.	C	AN	1/35
Conditional	N103	66	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67).	C	ID	1/2
			10 Department of Defense Activity Address Code (DODAAC)			
			33 Commercial and Government Entity (CAGE)			
Conditional	N104	67	**Identification Code** Code identifying a party or other code.	C	AN	2/17

Segment: **N2** **Additional Name Information**

Level: Header

Loop: SPI/N1

Optional **Usage:** Optional

Max Use: 2

Purpose: To specify additional names or those longer than 35 characters in length

Implementation Note:
Use of this segment is not necessary when the cited entity can be described by use of a CAGE code or a DoDAAC.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	**N201**	**93**	**Name** Free-form name.	**M**	**AN**	**1/35**
Optional	**N202**	**93**	**Name** Free-form name.	**O**	**AN**	**1/35**

Segment: **N3** **Address Information**

Level: Header

Loop: SPI/N1

Optional

Usage: Optional

Max Use: 2

Purpose: To specify the location of the named party

Implementation Note:
Use of this segment is not necessary when the cited entity can be described by use of a CAGE code or a DoDAAC.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	N301	166	**Address Information** Address information	M	AN	1/35
Optional	N302	166	**Address Information** Address information	O	AN	1/35

Optional

Segment: **N4** **Geographic Location**

Level: Header

Loop: SPI/N1

Usage: Optional

Max Use: 1

Purpose: To specify the geographic place of the named party

Syntax: *1.* R0105 — At least one of N401 or N405 is required.

2. P0506 — If either N405 or N406 is present, then the other is required.

Comments: *1.* A combination of either N401 through N404 (or N405 and N406) may be adequate to specify a location.

2. N402 is required only if city name (N401) is in the USA or Canada.

Implementation Note:
Use of this segment is not necessary when the cited entity can be described by use of a CAGE code or a DoDAAC.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Conditional	N401	19	**City Name** Free-form text for city name.	C	AN	2/30
Optional	N402	156	**State or Province Code** Code (Standard State/Province) as defined by appropriate government agency.	O	ID	2/2
Optional	N403	116	**Postal Code** Code defining international postal zone code excluding punctuation and blanks (zip code for United States).	O	ID	3/9
Optional	N404	26	**Country Code** Code identifying the country.	O	ID	2/3
Conditional	N405	309	**Location Qualifier** Code identifying type of location.	C	ID	1/2
Conditional	N406	310	**Location Identifier** Code which identifies a specific location.	C	AN	1/25

Segment: **PER** **Administrative Communications Contact**

Level: Header

Loop: SPI/N1

Optional **Usage:** Optional

Max Use: >1

Purpose: To identify a person or office to whom administrative communications should be directed

Syntax: *1.* P0304 — If either PER03 or PER04 is present, then the other is required.

2. P0506 — If either PER05 or PER06 is present, then the other is required.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	PER01	366	**Contact Function Code** Code identifying the major duty or responsibility of the person or group named. **IC** Information Contact ***Code Value Implementation Note:*** *Use Code IC for the information contact within the originator's organization.*	M	ID	2/2
Optional	PER02	93	**Name** Free-form name. ***Implementation Note:*** *Use to provide the name of the information point of contact.*	O	AN	1/35
Conditional	PER03	365	**Communication Number Qualifier** Code identifying the type of communication number. ***Implementation Note:*** *Use any appropriate code although Code EM is preferred.* **EM** Electronic Mail **FX** Facsimile **TE** Telephone **TM** Telemail	C	ID	2/2
Conditional	PER04	364	**Communication Number** Complete communications number including country or area code when applicable.	C	AN	1/25
Conditional	PER05	365	**Communication Number Qualifier** Code identifying the type of communication number.	C	ID	2/2
Conditional	PER06	364	**Communication Number** Complete communications number including country or area code when applicable.	C	AN	1/25

Segment: **HL** **Hierarchical Level**

Level: Detail

Loop: HL **Repeat:** >1

Mandatory

Usage: Mandatory

Max Use: 1

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments.

Comments: *1.* The HL Segment is used to identify levels of detail information using a Hierarchical Structure, such as relating line item data to shipment data, and packaging data to line item data.

2. The HL segment defines a top-down/left-right ordered structure.

3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment, and would be incremented by one in each subsequent HL segment within the transaction.

4. HL02 identifies the Hierarchical ID Number of the HL segment to which the current HL segment is subordinate.

5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order or item level information.

6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Implementation Notes:

1. The HL loop can be used to reference a single specification/item of technical information, e.g., an Engineering Data List, or multiple items that may or may not have a hierarchical relationship.

2. When referencing a single specification or item of technical information, e.g., an Engineering Data List, only one iteration of the HL loop is necessary.

3. When referencing multiple items that may or may not have a hierarchical relationship, repeat the HL loop as many times as required to specify all levels and use as many iterations of the HL/SPI loop as necessary.

4. When SPI07 is Code 01, the only entries in the Detail level (Table 2) are in HL01 and HL03.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
Mandatory			
HL01	628	**Hierarchical ID Number** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure.	M AN 1/12

Implementation Note:
This is a unique and progressive number assigned by the originator of the transaction set starting with the number 1.

Optional **HL02 734 Hierarchical Parent ID Number** **O AN 1/12**
Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to.

Implementation Note:
This data element is used only when referencing multiple specifications or items of technical information that have a hierarchical relationship.

Mandatory **HL03 735 Hierarchical Level Code** **M ID 1/2**
Code defining the characteristic of a level in a hierarchical structure.

Implementation Note:
Use any appropriate listed code to indicate the hierarchical relationship of the data.

A Assembly
F Component
I Item

Code Value Implementation Note:
Use Code I as the default code when no other code is applicable.

SY System
U Subassembly
ZZ Mutually Defined

Code Value Implementation Note:
Use Code ZZ only when SPI07 is Code 01. This is required to comply with the mandatory nature of this data element.

Optional **HL04 736 Hierarchical Child Code** **O ID 1/1**
Code indicating whether if there are hierarchical child data segments subordinate to the level being described.

Implementation Note:
When referencing single or multiple specifications/technical information that have no hierarchical relationship, no entry is required.

0 No Subordinate HL Segment in This Hierarchical Structure.

Code Value Implementation Note:
Use Code 0 to indicate the lowest level of the hierarchical relationship.

1 Additional Subordinate HL Data Segment in This Hierarchical Structure.

Code Value Implementation Note:
Use Code 1 to indicate there are lower level items in this hierarchical relationshio.

Segment: **SPI** **Specification Identifier**

Level: Detail

Loop: HL/SPI **Repeat:** >1

Optional

Usage: Optional

Max Use: 1

Purpose: To provide a description of the included specification or technical data items.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	SPI01	786	**Security Level Code** Code indicating the level of confidentiality assigned by the sender to the information following.	M	ID	2/2

Implementation Notes:

1. Use any code.

2. If the data item being referenced has both a government security classification and a commercial security protection requirement, then this data element will carry the government's security classification code and the commercial security protection code will be carried in SPI09.

3. If the data item being referenced has only one protection requirement, then this data item can carry either the government security classification or the commercial security protection code.

Mandatory	SPI02	128	**Reference Number Qualifier** Code qualifying the Reference Number.	M	ID	2/2

Implementation Note:

Any code may be used but typically used codes include:

DD Document Identification Code

Code Value Implementation Note:

Use Code DD for the reference number of an Engineering Data List.

DG Drawing Number
QC Product Specification Document Number
S1 Engineering Specification Number
S2 Military Specification Number (MILSPEC)
S3 Specification Number
TP Test Specification Number
W9 Special Packaging Instruction Number
ZZ Mutually Defined

Code Value Implementation Note:

Use Code ZZ for another type of reference number and identify that number in SPI04.

Mandatory	SPI03	127	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	M	AN	1/30
Optional	SPI04	790	**Entity Title** Title of the data entity.	O	AN	1/132

Implementation Note:
When SPI02 is Code ZZ, identify the reference number cited in SPI03.

Not Used	SPI05	791	**Entity Purpose**	O	AN	1/80
Optional	SPI06	792	**Entity Status Code** Code indicating the current status of the data item specified by the electronic data item.	O	ID	1/1

Implementation Note:
Use any code.

Z Mutually Defined

Code Value Implementation Note:
Use Code Z for another entity status code and explain in the MSG segment.

Not Used	SPI07	353	**Transaction Set Purpose Code**	O	ID	2/2
Not Used	SPI08	755	**Report Type Code**	O	ID	2/2
Optional	SPI09	786	**Security Level Code** Code indicating the level of confidentiality assigned by the sender to the information following.	O	ID	2/2

Implementation Note:
Use this data element ONLY when SPI01 is Code 90, 92, 93, 94, or 99, and the data item being referenced also has a commercial security protection requirement.

00 Company Non-Classified
01 Company Internal Use Only
02 Company Confidential
03 Company Confidential, Restricted (Need to Know)
04 Company Registered (Signature Required)
05 Personal
09 Company Defined (Trading Partner Level)

Not Used	SPI10	559	**Agency Qualifier Code**	O	ID	2/2
Not Used	SPI11	916	**Code List Reference**	O	AN	1/6
Not Used	SPI12	554	**Assigned Number**	O	N0	1/6

Segment: **RDT** **Revision Date/Time**

Level: Detail

Loop: HL/SPI

Optional **Usage:** Optional

Max Use: >1

Purpose: To specify the revision level of the electronic data item.

Syntax: *1.* C0102 — If RDT01 is present, then RDT02 is required.

2. L030405 — If RDT03 is present, then at least one of RDT04 or RDT05 are required.

3. C0605 — If RDT06 is present, then RDT05 is required.

Implementation Note:
Use this segment to specify the revision, change, or version of the specification/technical information being referenced.

Data Element Summary

	REF. DES	DATA ELEMENT	NAME	ATTRIBUTES		
Optional	RDT01	795	**Revision Level Code** Code indicating the revision or engineering change level of the data items referred to by the specification number. **A** Change Level **E** Revision Level **H** Version Level	O	ID	1/1
Conditional	RDT02	796	**Revision Value** Revision or engineering change level of the data items referred to by the specification number. ***Implementation Notes:*** *1. When RDT01 is Code A or E, indicate the change or revision number/letter.* *2. When RDT01 is Code H, specify the version of the data item, e.g., "As-Built" or "As-Shipped."*	C	AN	1/30
Optional	RDT03	374	**Date/Time Qualifier** Code specifying type of date or time, or both date and time. **007** Effective ***Code Value Implementation Note:*** *Use Code 007 to indicate the change, revision, or version date.*	O	ID	3/3
Conditional	RDT04	373	**Date** Date (YYMMDD). ***Implementation Note:*** *Enter the date of the change, revision, or version.*	C	DT	6/6
Not Used	RDT05	337	**Time**	C	TM	4/6
Not Used	RDT06	623	**Time Code**	O	ID	2/2

Segment: **LIN** Item Identification

Level: Detail

Loop: HL/SPI

Optional

Usage: Optional

Max Use: 1

Purpose: To specify basic item identification data.

Syntax: *1.* C0405 — If LIN04 is present, then LIN05 is required.

2. C0607 — If LIN06 is present, then LIN07 is required.

3. C0809 — If LIN08 is present, then LIN09 is required.

4. C1011 — If LIN10 is present, then LIN11 is required.

5. C1213 — If LIN12 is present, then LIN13 is required.

6. C1415 — If LIN14 is present, then LIN15 is required.

7. C1617 — If LIN16 is present, then LIN17 is required.

8. C1819 — If LIN18 is present, then LIN19 is required.

9. C2021 — If LIN20 is present, then LIN21 is required.

10. C2223 — If LIN22 is present, then LIN23 is required.

11. C2425 — If LIN24 is present, then LIN25 is required.

12. C2627 — If LIN26 is present, then LIN27 is required.

13. C2829 — If LIN28 is present, then LIN29 is required.

14. C3031 — If LIN30 is present, then LIN31 is required.

Semantic: LIN01 is the line item identification

Comments: *1.* See the Data Dictionary for a complete list of ID's.

2. LIN02 through LIN31 provide for fifteen (15) different product/service ID's for each item. For Example: Case, Color, Drawing No., UPC No., ISBN No., Model No., SKU.

Implementation Notes:

1. Use this segment to transmit information relative to the data item identified in SPI03, e.g., national stock number (NSN), part number, item description, etc.

2. LIN02 through LIN31 are used in pairs (i.e., LIN02 and LIN03) as required to carry additional information about the specific data item identified in SPI03.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME		ATTRIBUTES	
Not Used	LIN01	350	**Assigned Identification**	O	AN	1/11
Mandatory	LIN02	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	M	ID	2/2
			F7 End-Item Description			

Code Value Implementation Note:
Use Code F7 for the application reference from an Engineering Data List.

FS National Stock Number

Code Value Implementation Note:
Use Code FS for the National Stock Number.

IN Buyer's Item Number

Code Value Implementation Note:
Use Code IN for the CLIN or SUBCLIN.

MG Manufacturer's Part Number

Code Value Implementation Note:
Use Code MG for a manufacturer's part number.

PD Part Number Description

Code Value Implementation Note:
Use Code PD for a noun description from an Engineering Data List.

ZZ Mutually Defined

Code Value Implementation Note:
Use Code ZZ for the Data Tech organization.

Mandatory	**LIN03**	**234**	**Product/Service ID** Identifying number for a product or service.	**M**	**AN**	**1/30**
Optional	**LIN04**	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	**O**	**ID**	**2/2**
Conditional	**LIN05**	**234**	**Product/Service ID** Identifying number for a product or service.	**C**	**AN**	**1/30**
Optional	**LIN06**	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	**O**	**ID**	**2/2**
Conditional	**LIN07**	**234**	**Product/Service ID** Identifying number for a product or service.	**C**	**AN**	**1/30**
Optional	**LIN08**	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	**O**	**ID**	**2/2**
Conditional	**LIN09**	**234**	**Product/Service ID** Identifying number for a product or service.	**C**	**AN**	**1/30**
Optional	**LIN10**	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	**O**	**ID**	**2/2**
Conditional	**LIN11**	**234**	**Product/Service ID** Identifying number for a product or service.	**C**	**AN**	**1/30**
Optional	**LIN12**	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	**O**	**ID**	**2/2**
Conditional	**LIN13**	**234**	**Product/Service ID**	**C**	**AN**	**1/30**

			Identifying number for a product or service.				
Optional	LIN14	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	O	ID	2/2
Conditional	LIN15	234	**Product/Service ID** Identifying number for a product or service.	C	AN	1/30
Optional	LIN16	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	O	ID	2/2
Conditional	LIN17	234	**Product/Service ID** Identifying number for a product or service.	C	AN	1/30
Optional	LIN18	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	O	ID	2/2
Conditional	LIN19	234	**Product/Service ID** Identifying number for a product or service.	C	AN	1/30
Optional	LIN20	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	O	ID	2/2
Conditional	LIN21	234	**Product/Service ID** Identifying number for a product or service.	C	AN	1/30
Optional	LIN22	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	O	ID	2/2
Conditional	LIN23	234	**Product/Service ID** Identifying number for a product or service.	C	AN	1/30
Optional	LIN24	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	O	ID	2/2
Conditional	LIN25	234	**Product/Service ID** Identifying number for a product or service.	C	AN	1/30
Optional	LIN26	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	O	ID	2/2
Conditional	LIN27	234	**Product/Service ID** Identifying number for a product or service.	C	AN	1/30
Optional	LIN28	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	O	ID	2/2
Conditional	LIN29	234	**Product/Service ID** Identifying number for a product or service.	C	AN	1/30

Optional	LIN30	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	O	ID	2/2
Conditional	LIN31	234	**Product/Service ID** Identifying number for a product or service.	C	AN	1/30

Segment: **N1** **Name**

Level: Detail

Loop: HL/SPI

Optional **Usage:** Optional

Max Use: >1

Purpose: To identify a party by type of organization, name and code

Syntax: *1.* R0203 — At least one of N102 or N103 is required.

2. P0304 — If either N103 or N104 is present, then the other is required.

Comment: This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
Mandatory	N101	98	**Entity Identifier Code** Code identifying an organizational entity, a physical location, or an individual	M ID 2/2
		33	Inquiry Address	
			Code Value Implementation Note: *Use Code 33 to identify a Data Tech entity from an Engineering Data List.*	
		ZE	End Item Manufacturer	
			Code Value Implementation Note: *Use Code ZE to identify the manufacturer from an Engineering Data List.*	
Conditional	N102	93	**Name** Free-form name.	C AN 1/35
Conditional	N103	66	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67).	C ID 1/2
		10	Department of Defense Activity Address Code (DODAAC)	
		33	Commercial and Government Entity (CAGE)	
Conditional	N104	67	**Identification Code** Code identifying a party or other code.	C AN 2/17

Segment: **MSG** **Message Text**

Level: Detail

Loop: HL/SPI

Optional

Usage: Optional

Max Use: >1

Purpose: To provide a free form format that would allow the transmission of text information.

Comment: MSG02 is not related to the specific characteristics of a printer, but identifies top of page, advance a line, etc.

Implementation Notes:

1. Use this segment to provide information relative to a specific data item.

2. Maximum use is 3.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	MSG01	933	**Free-Form Message Text** Free-form message text.	M	AN	1/264
Not Used	MSG02	934	**Printer Carriage Control Code**	O	ID	2/2

Segment: SE **Transaction Set Trailer**

Level: Summary

Loop: ____

Mandatory **Usage:** Mandatory

Max Use: 1

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments).

Comment: SE is the last segment of each transaction set.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	SE01	96	**Number of Included Segments** Total number of segments included in a transaction set including ST and SE segments.	M	N0	1/10
Mandatory	SE02	329	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9

Implementation Note:
Enter the same number as carried in ST02.

4.0 ASC X 12 FORMS

In this chapter, applicable ASC X12 forms are presented.

Rev. 9/14/92

ASC X12 WORK REQUEST FORM

SUBMITTER INSTRUCTIONS

NOTE: ALL REQUESTS MUST BE TYPED OR PRINTED LEGIBLY IN BLACK INK. INCOMPLETE OR ILLEGIBLE WORK REQUESTS WILL BE RETURNED TO THE SUBMITTER.

Submit completed forms to: Technical Department, ASC X12 Secretariat, Data Interchange Standards Association, Inc., 1800 Diagonal Road, Suite 355, Alexandria, VA 22314-2852 or FAX (703) 548-5738. Submitters are notified of the status of the work request after it has been reviewed by X12J Technical Assessment Subcommittee.

1. **TO USE THIS FORM TO REQUEST A CHANGE TO AN EXISTING STANDARD(S),** use ONE Work Request (WR) Form to list all changes needed to meet one BUSINESS REASON. Otherwise use multiple forms. If more space is necessary, numbered attachments may be used for continuation.

2. **TO USE THIS FORM FOR SUPPORTING DATA MAINTENANCE FOR A NEW DRAFT STANDARD,** list all information on ONE form; use attachments as necessary. List first all new segments, then all new data elements/codes/code sources. Then list revisions to existing segments and data elements/codes/code sources; provide a business case for revisions to existing standards. Then list any others changes needed (e.g., X12.5, X12.6), including justification.

3. **TO USE THIS FORM TO REQUEST A PROPOSED NEW X12 STANDARDS PROJECT,** provide the business need and justification for the new project in Part D. The WR will be referred to an X12 subcommittee for analysis.

ADDITIONAL INFORMATION FOR COMPLETING THIS FORM:

PART A: SUBMITTER INFORMATION: The WR may represent the position of an individual, industry group, work group, X12 subgroup, etc. If the WR represents the position of an X12 subcommittee-related work group, the subcommittee chair must initial the WR.

PART B: REFERENCE USED: Indicate the version/release or edition of the standard you are using as a reference.

PART C: RAMIFICATIONS: List affected transaction sets, segments and data elements, or other standards. For a control standard, name the affected page and section number.

PART D: BUSINESS CASE/REASON FOR CHANGE: Provide a complete scenario that describes the business function/operation that will be satisfied by a change to the standard. Be specific, because this information will appear in the X12 membership ballot package and will be the only information that members have on which to base their vote. X12J Technical Assessment Subcommittee requires enough information to be able to propose an alternate solution to the one provided, if necessary.

PART E: PROPOSED WORK: List the specific changes being requested. Give the names and associated identifiers of the standards segments, data elements and codes affected by the changes. Definitions for new codes and for industry-specific terms must be complete. For new codes, provide a proposed code and a code definition. RULES: (1) Acronyms/abbreviations cannot be added to the standards--they must be spelled out. (2) Provide an expanded code definition for each code that is not completely self explanatory, that is, terms that are not in general business use or that are industry specific. (3) Provide code source references for all externally published (non-X12) code lists cited (use the Form for New or Revised Code Source Reference, page 2 of the form).

Rev 9/14/92

Date Submitted _____ (Submitter Provide)

DM NUMBER _____ (Secretariat Only)

ASC X12

WORK REQUEST FORM

A. SUBMITTER INFORMATION:

Submitter Name _____ Company _____

Address _____ Address/ZIP _____/ZIP +4 _____

Phone _____

Submission represents the position of: _____ SC Chair Initials: _____

B. REFERENCE USED: Version _____/Release _____/Subrelease _____ or Workbook (date) _____

C. RAMIFICATIONS:

Transaction Set(s) Used _____
Segment(s) Affected _____
Data Element(s) Affected _____
Other Standard(s) _____

D. BUSINESS CASE/REASON FOR CHANGE:

E. PROPOSED WORK:

5.0 GLOSSARY

This chapter contains ASC X12- and DoD-specific glossaries.

5.1 X12 GLOSSARY

ANSI
American National Standards Institute

ANSI Standard
A document published by ANSI that has been approved through the consensus process of public announcement and review. Each such standards must have been developed by an ANSI committee and must be revisited by that committee within 5 years for updating. See Draft Standard for Trial Use (DSTU).

Area Transaction Set
A predefined area within a transaction set (header, detail, summary) containing segments and their various attributes.

ASC X12
Accredited Standards Committee, X12. It comprises industry members who create electronic data interchange (EDI) standards for submission to ANSI for subsequent approval and dissemination.

Authentication
A mechanism that allows the receiver of an electronic transmission to verify the sender and the integrity of the content of the transmission through the use of an electronic "key" or algorithm shared by the trading partners. That algorithm is sometimes referred to as an electronic signature.

Compliance Checking
A checking process that is used to ensure that a transmission complies with ANSI X12 syntax rules.

Conditional (C)
A data element requirement designator that indicates that the presence of a specified data element is dependent on the value or presence of other data elements in the segment. The condition must be stated and must be computer processable.

Control Segment
A segment that has the same structure as a data segment but is used for transferring control information for grouping data segments. Control segments may be loop control segments (LS/LE), transaction set control segments (ST/SE), or functional group control segments (GS/GE), defined in X12.6, or interchange control segments (ISA/IEA/TA1) defined in X12.5.

Data Element

The basic unit of information in the EDI standards containing a set of values that represent a singular fact. It may be single-character codes, literal descriptions, or numeric values.

Data Element Length

The range, minimum to maximum, of the number of character positions available to represent the value of a data element. A data element may be of variable length and range from minimum to maximum or it may be of fixed length in which the minimum is equal to the maximum.

Data Element Reference Number

Number assigned to each data element as a unique identifier.

Data Element Requirement Designator

A code defining the need for a data element value to appear in the segment if the segment is transmitted. The X12 codes are mandatory (M), optional (O), or conditional (C). DoD may consider a segment "mandatory" even through it is "optional" by X12 standards.

Data Element Separator

A unique character preceding each data element that is used to delimit data elements within a segment. DoD uses "*" as the delimiter.

Data Element Type

A data element may be one of six types: numeric, decimal, identifier, string, date, or time.

Delimiters

Two levels of separators and a terminator. The delimiters are an integral part of the transferred data stream. They are specified in the interchange header and may not be used in a data element value elsewhere in the interchange. From highest to lowest level, the separators and terminator are segment terminator and data element separator.

DISA

Data Interchange Standards Association. A nonprofit organization funded by ASC X12 members to serve as the Secretariat for X12.

DSTU

Draft Standard for Trial Use. It represents a document approved for publication by the full X12 committee following membership consensus and subsequent resolution of negative votes. (Final Report of X12 Publications Task Group). The Draft EDI Standard for Trial Use document represents an ASC X12 approved standard for use prior to approval by ANSI. See ANSI Standard.

EDI

Electronic data interchange. The computer-application-to-computer-application exchange of business information in a standard format.

Electronic Envelope

Electronic information that binds together a set of transmitted documents being sent from one sender to one receiver.

Element Delimiter

A single-character that follows the segment identifier and separates each data element in a segment except the last.

Functional Group

A group of one or more transaction sets bounded by a functional group header segment and a functional group trailer segment.

Functional Group Segments (GS/GE)

These segments identify a specific functional group of documents such as purchase orders.

Industry Conventions

Defines how the ASC X12 standards are used by the specific industry

Industry Guidelines

Defines the EDI environment for using conventions within an industry. It provides assistance on how to implement X12 standards.

Interchange Control Segments (ISA/IEA)

These segments identify a unique interchange being sent from one sender to one receiver (see electronic envelope).

Interchange Control Structure

The interchange header and trailer segments that envelop one or more functional groups or interchange-related control segments and perform the following functions: (1) defines the data element separators and the data segment terminators, (2) identifies the sender and receiver, (3) provides control information for the interchange, and (4) allows for authorization and security information. (X12.5)

Loop

A group of semantically related segments; these segments may be either bounded or unbounded (X12.6). The N1 loop is an example of a loop, which includes Segments N1 to PER for name and address information.

Mandatory (M)

A data element/segment requirement designator that indicates the presence of a specified data element is required.

Mapping
The process of identifying the standard data element's relationship to application data elements.

Max Use
Specifies the maximum number of times a segment can be used at the location in a transaction set

Message
Entire data stream including the outer envelope

Optional (O)
A data element/segment requirement designator that indicates the presence of a specified data element/segment is at the option of the sending party and can be based on the mutual agreement of the interchange parties.

Qualifier
A data element that identifies or defines a related element, set of elements, or a segment. The qualifier contains a code taken from a list of approved codes.

Repeating Segment
A segment that may be used more than once at a given location in a transaction set. See Max Use.

Security
System screening that denies access to unauthorized users and protects data from unauthorized uses

Segment
Segments consist of logically related data elements in a defined sequence. A data segment consists of a segment identifier, one or more data elements each preceded by an element separator, and a segment terminator.

Segment Directory
Provides the purpose and format of the segments used in the construction of transaction sets. The directory lists each segment by name, purpose, identifier, the contained data elements in the specified order, and the requirement designator for each data element.

Segment Identifier
A unique identifier for a segment, consisting of a combination of two or three upper-case letters and digits. The segment identifier occupies the first-character positions of the segment. It is not a data element. The segment identifier in EDIFACT is a component data element — part of a composite data element consisting of a segment identifier and an explicit looping designator.

Segment Terminator

A unique character appearing at the end of a segment to indicate the termination of the segment, e.g., N/L.

Syntax

The grammar or rules that define the structure of the EDI standards (i.e., the use of loops, qualifiers, etc.). Syntax rules are published in ANSI X12.6.

Transaction Set

A document that unambiguously defines, in the standard syntax, information of business or strategic significance and consists of a header segment, one or more data segments in a specified order, and a trailer segment.

Transaction Set ID

An identifier that uniquely identifies the transaction set. This identifier is the first data element of the transaction set header segment.

Translation

The act of accepting documents in other than standard format and translating them to the standard.

Version/Release

Identifies the publication of the standard being used for the generation or the interpretation of data in the X12 standard format. May be found in the Functional Group Header Segment (GS) and in the Interchange Control Header Segment (ISA). See Control Segment.

VICS Committee

Voluntary Interindustry Communications Standards for EDI.

X12

The ANSI committee responsible for the development and maintenance of standards for EDI.

X12.5

Interchange Control Structure. This standard provides the interchange envelope of a header and trailer for the electronic interchange through a data transmission, and it provides a structure to acknowledge the receipt and processing of this envelope.

X12.6

Application Control Structure. This standard describes the control segments used to envelop loops of data segments, transaction sets, and groups of related transaction sets.

5.2 DoD GLOSSARY

AIS
Automated information systems

DUSD (Logistics)
Deputy Under Secretary of Defense (Logistics)

DES
Data encryption standard

DISA
Defense Information Systems Agency

DLA
Defense Logistics Agency

ISA
Interchange control header identifier

NIST
National Institute of Standards and Technology

NTE
Note identifier

PLUS
Protection of logistics unclassified/sensitive systems

UN/EDIFACT
EDIFACT; electronic data interchange for administration, commerce, and transport

USD (A & T)
Under Secretary of Defense for Acquisition and Technology

REPORT DOCUMENTATION PAGE

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12a. DISTRIBUTION/AVAILABILITY STATEMENT

A: Approved for public release; distribution unlimited

12b. DISTRIBUTION CODE

13. ABSTRACT ***(Maximum 200 words)***

This is a draft Electronic Data Interchange (EDI) systems design document that describes the draft standard or "convention" the Department of Defense (DoD) will use to reference specifications/technical information, which pertain to a solicitation, using the ASC X12 Transaction Set 841 Specifications/Technical Information (003030).

14. SUBJECT TERMS

Electronic Data Interchange; EDI; DoD EDI Convention; Electronic Commerce; ANSI X12, X12; electronic standards; electronic business standards; computer-to-computer exchange of data; electronic documents; electronic records;paperless environment; conventions

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